UNCLASSIFIED

AD NUMBER

AD837545

NEW LIMITATION CHANGE

TO

Approved for public release, distribution unlimited

FROM

Distribution authorized to U.S. Gov't. agencies and their contractors; Critical Technology; 07 APR 1967. Other requests shall be referred to Department of the Army, Office of the Adjutant General, Washington, DC 20310.

AUTHORITY

AGO D/A ltr, 29 Apr 1980

THIS PAGE IS UNCLASSIFIED

AD837545

DEPARTMENT OF THE ARMY
OFFICE OF THE ADJUTANT GENERAL
WASHINGTON, D.C. 20310

IN REPLY REFER TO
AGAM-P (M) (14 Jul 67) FOR OT

18 July 1967

SUBJECT: Operational Report - Lessons Learned, HQ, 14th Inventory Control Center

STATEMENT #2 UNCLASSIFIED

TO: SEE DISTRIBUTION

This document is subject to special export controls and each transmittal to foreign governments or foreign nationals may be made only with prior approval of DA, office of Asst. Chief of Staff for Force Development FOR OT RD Washington, D.C. 20310

1. Forwarded as inclosure is Operational Report - Lessons Learned, Headquarters, 14th Inventory Control Center for quarterly period ending 31 January 1967. Information contained in this report should be reviewed and evaluated by CDC in accordance with paragraph 6f of AR 1-19 and by CONARC in accordance with paragraph 6c and d of AR 1-19. Evaluations and corrective actions should be reported to ACSFOR OT within 90 days of receipt of covering letter.

2. Information contained in this report is provided to the Commandants of the Service Schools to insure appropriate benefits in the future from lessons learned during current operations, and may be adapted for use in developing training material.

BY ORDER OF THE SECRETARY OF THE ARMY:

Kenneth G. Wickham

1 Incl
as

KENNETH G. WICKHAM
Major General, USA
The Adjutant General

DDC
AUG 12 1968
DISCLOSURE A

DISTRIBUTION:
Commanding General
US Army Combat Development Command
US Continental Army Command
Commanding Officer
US Army Security Agency Training Center & School
Commandants
US Army Command and General Staff College
US Army War College
US Army Air Defense School
US Army Armor School
US Army Artillery and Missile School
US Army Chemical Corps School
US Army Engineer School
US Army Military Police School
US Army Infantry School

(Continued on page 2)

FOR OT RD
670186

14

Best
Available
Copy

DEPARTMENT OF THE ARMY
HEADQUARTERS, 14TH INVENTORY CONTROL CENTER
APO 96307

AVCA SCM-IC-30 7 April 1967

SUBJECT: Operational Report for Quarterly Period Ending 31 January 1967 (RCS CSFOR-65)

TO: Commanding General
1st Logistical Command
ATTN: AVCA GO-O
APO 96307

OPERATIONAL REPORTS - LESSONS LEARNED

SECTION I - SIGNIFICANT ORGANIZATION OR UNIT ACTIVITIES.

1. The 14th ICC moved into its permanent location at 11 Do-Thanh-Nhan, Saigon on 29 October 1966. Thus, for the first time, the ICC became a complete entity in a single facility. The major effort following occupancy of the new building was to obtain a source of stable 60 cycle power so that the Data Processing Division could establish a separate machine room. The power was installed in the building on 18 November 1966.

2. As of 1 November 1966, the ICC had just completed Phase I of its schedule for activiation into its mission of integrated materiel inventory management and had just published the first Stock Status Report for the 1st Logistical Command (24 Oct 66). This historic listing made it possible for the first time to simultaneously compare the requisitioning objectives, stockage, due-in and due-out data at each depot. This listing was reviewed and the following general types of actions were taken:

a. Reportable item code errors were corrected.

b. Material category code errors were corrected.

c. ASL items which could not be identified were recommended for deletion.

Thus during the month of November many of the available man hours were utilized to familiarize the Stock Management Division personnel with the stock status reporting system so that they could learn the ways in which the reports could be used to make management decisions.

FOR OT RD
670186

TEXT NOT REPRODUCIBLE

3. Concurrently, during November, Phase II of the schedule for activation was initiated. This Phase generally provided for the transfer of the depot due-in files to the 14th ICC; the assumption of responsibility for initiating all depot stockage replenishment actions; the maintenance and posting of due-in status information; provisions for automatic follow-up on dues-in, provision for statistical and some special management reports as required by HQ, 1st Log Comd, and the initiation of the program to adjust, establish and delete requisitioning objectives.

a. During the period 25 November through 6 December 1966, the task of transferring the due-in files of the depots was accomplished. The initial order of business upon assumption of the theater due-in file was a joint on-order reconciliation of USARV dues-in with 2d Logistical Command and the CONUS NICP's; this was completed on 26 December, and since that time, all supply actions have been mechanically processed on an operating cycle basis. Concurrent with the reconciliation, an intensive review of the total assets (on hand balances and dues-in) was initiated, and the results were compared with the respective requisitioning objectives; this procedure, which has been continued and amplified, has resulted in the cancellation of many requisitions which had been submitted to 2d Log Comd and the CONUS NICP's.

b. Prior to 1 December 1966, replenishment requisitions were transceived to the 14th ICC by the depots; however, as of 1 December, the 14th ICC assumed the responsibility for initiating all replenishment requisitions for depot stocks in RVN.

c. As an adjunct to each stock status report run, stock status statistics covering theater balance file and stockage list data are published; these statistics enable the 14th ICC to provide recurring and special management reports as required by HQ, 1st Logistical Command. A prime example of these reporting requirements is the 1st Logistical Command Supply Operations Report (RCS-AVCA GL-8) which was initiated in December 1966.

d. Once the 14th ICC had assumed its mission of central inventory management of assigned classes of supply for USARV, one of its major inherent functions was to constantly screen and review the established requisitioning objectives for validity. This program was begun during the month of December when approximately 18,000 line items were reviewed.

4. Beginning in December, all high priority (02-05) requisitions passed to the ICC by the depots were screened against in-country assets and, where feasible, were referred to a secondary depot for fill. This in-country referral action has resulted in approximately 10% of the passed requisitons being filled in-country rather than being forwarded to 2d Log Comd or to the CONUS NICP's, therefore conserving not only

TEXT NOT REPRODUCIBLE

time but also reducing cost. Also during this same time frame redistribution (cross leveling) action was initiated by the 14th ICC; this entailed the issuing of redistribution orders directing depots to ship their excesses to other depots with zero balances and/or dues-out for the same item. In summary, through 31 January 1967, the number of line items involved in the in-country referral actions, redistribution actions, and cancellation actions was 5385 lines for a dollar value of $41,093,966. At the same time the combat forces received their requested materiel much more rapidly than would have otherwise been possible.

5. As was briefly mentioned in the last report, the Stock Management Division of the 14th ICC was given the responsibility for management of approximately 300 Command Controlled Items on 31 October 1966. As machine capability was not available during Phase I, it was necessary to manually maintain all data for the controlled item Availability Balance File (ABC). Originally it was anticipated that this file could be processed mechanically after 15-20 days; however, various factors have caused repeated delays, and as of 31 January, all ABC data for controlled items is still processed manually. It is now anticipated that the ABC procedure for command controlled items will be mechanized during April 1967.

6. When the 14th ICC initially assumed its mission, machine support for the Red Ball Express (RBE) program was still satellited on the 506th Field Depot. Upon assumption of the machine support function, the 14th ICC began initial processing of approximately 400 (RBE) requisitions per day. In order to accomplish the above, three basic files were maintained: an open requisition file, an open receipts in-country file, and a closed history file. Concurrently, four status reports were initiated: a report of open receipts in-country, a report of open requisitions, a selected items report, and an age of outstanding requisitions report. During the first week in January, the Red Ball Expanded (RBX) program was initiated and on 17 January, the 14th ICC implemented in-country referral action; this meant that all RBE and RBX requisitions were now screened against in-country assets.

7. By 31 January 1967, Phase III of the schedule for activation was basically completed. This Phase generally provided for the transfer of the depot demand history files to the 14th ICC; assumption of the responsibility for analysis of this demand history and the production of the balance of the planned management reports; arrangement for periodic receipt of catalog change information from 2d Log Comd and for the provision of changes applicable to each depot in usable punch card format.

TEXT NOT REPRODUCIBLE

3. During the report period the following organizational changes were effected: 4

a. The Systems Development Committee of the Data Processing Division mentioned in the previous report was dissolved and the personnel involved reverted to their normally assigned functions.

b. Prior to 1 November 1966, Document Control and Audit Branch (DCAB) was strictly a Document Control Section. When the Stock Management Division began generating output, the Audit Section of DCAB was organized to audit all generated documents for correctness of format. Auditing procedures and formats were based on formats delineated in the 14th ICC Basic Processing Manual.

c. The transceiver at the 506th Field Depot was replaced with a new machine which was installed at the present 14th ICC location on 25 November 1966. Since installation of the new transceiver, the percentage of transceiver batches received in Okinawa within 3 days after transmission has increased from 60.1% to 91.2%.

SECTION II, PART 1 - OBSERVATIONS (LESSONS LEARNED)

1. Personnel:

a. Military (TOE)

Discussion and Observations

The 14th ICC presently operates under TOE 29-402T as amended by GO 292, Headquarters III Corps and Fort Hood, dated 21 September 1965. The Center is functioning under SRC 29-402T520 which denotes "when organic to Corps Support Command in an independent corps sized force." The authorized strength under this configuration is 43 commissioned officers, 4 warrant officers and 321 enlisted men. Structurally, it provides for Headquarters, Plans and Policy Office, an Admin Branch, a Company Headquarters, a Stock Management Division with a Division Headquarters, 5 branches and 13 sections, and Data Processing Division with 4 branches.

After being fully operational for a relatively short period of time, the planners at the 14th ICC realized that the current TOE under which the unit was operating was inadequate as it did not provide sufficient numbers of personnel to adequately perform the assigned mission (combat and geographical environment contributed to extraordinary workload conditions). Also it was noted that the Center was organized under a tentative TOE which had not been field tested prior to deployment; in fact it was actually being field tested under

TEXT [illegible] REPRODUCIBLE

combat conditions, conditions which in many respects could not have been envisioned by the designers of the TOE. Therefore the 14th ICC published a proposed MTOE which was forwarded through channels in the latter part of December 1966. This MTOE changed some of the basic organizational and functional structures of the Center and reflected an aggregate strength increase of 102 personnel (11 commissioned officers, 5 warrant officers, and 86 enlisted men).

b. Civilian (TDA)

Discussion and Observation:

The Supply System within CONUS is generally staffed with civilian personnel. Highly trained career people with valuable experience are essential for the accomplishment of an inventory control mission; this is even more so correct in a combat zone. Because the CONUS NICP's are civilian staffed, the training bases for providing this knowledge to military personnel are not available in sufficient scope and depth to provide adequate numbers of trained military personnel either to originally staff or to insure adequate rotational flow of replacements.

Prior to the action mentioned in para 1a above, the possibility of augmenting the 14th ICC with Department of the Army Civilians was considered. The primary purpose for this consideration was to provide the technical knowledge and assistance necessary for implementation of technical procedures of commodity management and for continuous on the job training of military personnel who are less than fully qualified in logistics. It was felt, therefore that civilian personnel were necessary to augment both the numbers and the know-how of the military personnel, to provide on the job training supervisors, and to up grade the level of performance of the commodity managers both in quality and speed for improved responsiveness of the in-country supply organization. As a result, a proposed TDA was published for the addition of 127 DAC spaces within the 14th ICC. The grade structure desired ranged from GS-15 through GS-5 and the job descriptions from Executive Asst/Technical Adv to Secretary/Stenographer.

2. Operations:

a. Automatic Data Processing System (ADPS)

Discussion and Observation:

(1) As stated in the report for the previous quarter, programs and procedures were developed before the actual arrival of equipment. This late arrival of equipment required that the 14th ICC

became operational before all programs and systems were completely tested and debugged. As a consequence, the initial operational period was handicapped by the requirement to debug systems, machines, and programs concurrent with actual output runs.

(3) In mid-December 1966, a due-in reconciliation file was received from the NICP's through 2d Log Cmd Okinawa. It was assumed that the file had been completely reconciled and that it contained only the latest status information. On this basis the NICP file was used to reconcile the 14th ICP due-in status file which in turn, was used to update the Availability Balance File (ABC). During replenishment processing it was discovered that numerous duplications had been received in the NICP file. Immediate action was taken to purify the due-in file and re-update the ABC File.

(3) During initial output runs a major file sequencing error was discovered in cards used as input to the U1005. An analysis of the problem revealed that the U1005 does not have the capability of detecting high/low sequence but can only detect equal/unequal conditions when processing alpha information. This limitation of the U1005 makes it incompatible with the IBM 188 collator which must recognize both equal/unequal and high/low sequence conditions. Thus alpha information sequenced on the collator is normally out of sequence for the U1005. To correct this difficulty it was necessary to pull from all files, cards containing alpha information in the Federal Stock Number field and have stock management personnel convert these to all numeric data. This problem is significant only when the auxilary reader is used in conjunction with the main reader.

(4) Equipment malfunctions in the U1005 systems continue to be a major problem. Incorrect compilation, lost memory, punching errors, print out errors, and improper loading of object decks have resulted in numerous re-runs which have proved to be extremely costly in terms of productive output.

(5) Power and air conditioning were initially a major cause of ADPE downtime in November and December 1966. Commercial power proved inadequate and undependable and backup generators were installed. All data processing equipment now depends exclusively on generator power. These generators are not guaranteed to produce cycle and voltage power within the limits prescribed by UNIVAC for the U1005. To correct this, power stabilizers have been installed for each U1005 system to control voltage. Cycle fluctuations may still be a contributing problem to machine failure. Therefore, graph-type meters have been ordered to record both cycle and power fluctuations in an effort to firmly establish whether such fluctuations can be directly related to systems failures.

TEXT NOT REPRODUCIBLE

TEXT NOT REPRODUCIBLE

(6) Variations in data content and format of input transactions received from the field depots has necessitated the development of special U1005 programs to convert such data into inputs which are processable by the 14th ICC. Much of this has been caused by the fact that all depots as well as the 14th ICC have become operational while their supporting ADPS was still in the developmental stage. Liaison trips by members of the 14th ICC have proved highly beneficial and future trips are planned.

(7) UNIVAC school trained military repairmen have been assigned but must diagnose and repair ADPE breakdowns largely on their own without benefit of technical assistance. Although the school does provide an adequate basic course of instruction, months of experience are required before a repairman can become fully qualified. On the job training under a fully qualified and experienced repairman should be a prerequisite to each permanent assignment.

(8) Electrical power provided to the 14th ICC was not adequately checked out prior to site occupancy. Although the rental contract calls for the owner to provide all necessary power, no means of positively identifying the power requirements and insuring that such was firm prior to occupancy was provided. The transformer installed by the city to provide power to the 14th ICC is not compatible with our power requirements. Consequently a step-down transformer has been ordered and must be installed before city power can be used.

(9) A review of the historical records of the 14th ICC indicate that the U1005 was directed as prime hardware and the stock management system was built around that equipment. There does not appear to have been a complete, comprehensive, systems study to determine whether the U1005 was capable of performing all desired functions.

b. Total number of days unit engaged in operations during reporting period: 92.

3. Training:

Due to the nature of the mission of the 14th Inventory Control Center, minimal formal training was conducted during the reporting period. The majority of the training conducted was of the "on-the-job" variety.

SECTION II, PART 2 - RECOMMENDATIONS

1. When establishing a new data processing activity programmed dates of installation of equipment and assumption of mission should be firmly established. However, the currently existing system should remain

TEXT NOT REPRODUCIBLE

fully operational until such time as equipment is installed in the new activity and integrated tests and debugging of all systems have been completed. Only then should the old system be phased out.

2. Pre-edit procedures must be built into all systems to insure that data received from external sources adheres to established formats, procedures, and codes. Such data should never be accepted at face value.

3. All locally assigned Federal Stock Numbers must contain numeric data only, when such numbers are used in systems employing the U1005. All U1005 users should be so notified.

4. The accuracy and dependability of the U1005 system within the Republic of Vietnam remains questionable. In order to insure that voltage remains as constant as possible and within the tolerances prescribed by UNIVAC, it is highly recommended that voltage stablizers be installed with each U1005 system. In order to record voltage and cycle fluctuations and to make a comparative analysis between such fluctuations and equipment malfunctions, it is highly recommend that constant recording voltage and cycle meters be installed with any new U1005 system. Only those generators guaranteed to produce power within the tolerance prescribed for the U1005 should be installed as an equipment power source.

5. To insure optimum understanding of the stock manager system, one single interrelated system should be developed for use in all depots. One data processing activity should be charged with the responsibility of systems design and change. Personnel resources currently available to the 14th ICC are inadequate to assume this workload.

6. Every effort must be made to obtain personnel who are at least trained in data processing equipment operations. It is also recommended that all officers and enlisted men, scheduled for assignment to an overseas inventory control center, receive intensive training in inventory management prior to leaving CONUS. This training period should be for at least 60 days. This would provide personnel who are already familiar with the terminology and basic policies and procedures of inventory management. On arrival they would only have to adjust to the particular situation here.

7. The present maintenance contract whereby the US Army performs first line maintenance with UNIVAC performing second line maintenance must be changed. The formal instruction presently provided by UNIVAC at Utica, New York, does not offer the depth of training that can only be gained through experience. The temporary alternate solution now in use whereby UNIVAC has assigned one CE full time to 14th ICC on a temporary basis is proving beneficial.

AVC/ [illegible]-IS-[illegible] 7 April 1967
SUBJECT: Operational Report for Quarterly Period Ending 31 January 1967 (RCS CSFOR-65)

8. A full and comprehensive power survey must be made of each planned new installation. Where locally available power is not compatible with planned building use and/or equipment, adequate generator power arrangements must be made. This should be clearly spelled out and certified in any rental contract or construction plan.

9. Before hardware is selected for any automated system, a complete systems study should be completed. Each equipment configuration has limitations beyond which it cannot be expanded. Currently discussed systems expansions for the 14th ICC greatly exceed the capability of the U1005. It is now obvious that appreciable expansion of the system will be contingent upon the acquisition of a larger more powerful central processor.

R. A. Baughman

R. A. BAUGHMAN
Colonel, QMC
Commanding

TEXT NOT REPRODUCIBLE

AVCA GO-O (7 Apr 67) 1st Ind
SUBJECT: Operational Report for Quarterly Period Ending 31 January 1967 (RCS CSFOR-65)

HEADQUARTERS, 1ST LOGISTICAL COMMAND, APO 96307 14 APR 1967

TO: Deputy Commanding General, United States Army Vietnam, ATTN: AVHGC-DH, APO 96307

1. The Operational Report - Lessons Learned submitted by the 14th Inventory Control Center, for the quarterly period ending 31 January 1967, is forwarded herewith.

2. Reference paragraph 1a, page 4: The MTOE was returned to the 14th Inventory Control Center in late February for further study and with recommended changes.

3. The 14th Inventory Control Center engaged in combat support operations for 92 days during the reporting period.

4. Concur with the report. The report is considered adequate.

FOR THE COMMANDER:

Timothy S O'Hara

TIMOTHY S. O'HARA
[illegible]
Acting Asst AG

TEL: 430/782

1 Incl
nc

TEXT NOT REPRODUCIBLE

AVHGC-DST (9 Apr 67) 2d Ind
13 SUBJECT: Operational Report-Lessons Learned For The Period Ending 31 January 1967 (RCS CSFOR-65)

HEADQUARTERS, UNITED STATES ARMY VIETNAM, APO San Francisco 96307 17 MAY 196

TO: Commander in Chief, United States Army, Pacific, ATTN: GPOP-OT APO 96558

1. This headquarters has reviewed the Operational Report-Lessons Learned for the period ending 31 January 1967 from Headquarters, 14th Inventory Control Center as indorsed.

2. Pertinent comments follow:

a. Reference paragraph 1b, page 5, concerning a TOA for Department of the Army civilians (DAC): The proposed TOA for the 14th Inventory Control Center (ICC), (55 AFJ099 00), containing 127 DAC spaces, was submitted to USARPAC 15 March 1967. Information received from USARPAC indicates that it was forwarded to DA on 3 April 1967.

b. Reference paragraph 2a(1), pages 5 and 6, and paragraph 1, part 2, section II, page 7, concerning the programming of a new data processing activity: The system recommended by the reporting unit is the normal procedure when establishing new automatic data processing (ADP) activities, or converting existing ones to different equipment or methods of operation. The decision to require the 14th ICC to convert from manual to automated operation as ADP equipment became available was based on the urgent need to establish this key logistical activity as an operational facility. ADP support is required for proper accomplishment of the 14th ICC's combat support mission. The benefits which accrued to this command by this decision far outweighed the handicaps encountered.

c. Reference paragraphs 2a(2), 2a(3), and 2a(6), pages 6 and 7, and paragraphs 2, 3, and 5, page 8, concerning recommended methods of improving ADP operations: Concur. A letter from this headquarters will be forwarded to the 1st Logistical Command, requesting that the recommendations of reporting unit be implemented by the 14th ICC.

d. Reference paragraph 2a(5), page 6, paragraph 2a(8), page 7, and paragraphs 4 and 6, pages 8 and 9, concerning electrical power requirements: At the time the power system was installed, precise power was not specified as a requirement. Unless it has been positively determined that in-country power resources are adequate for support of a deploying ADP center, the necessary items such as precise power generators, power stabilizers, and individual stepdown transformers should be

TEXT NOT REPRODUCIBLE

AVHGC-DST (9 Apr 67) 2d Ind 17 MAY 1967
SUBJECT: Operational Report-Lessons Learned for the Period Ending 31 January 1967

shipped as part of the overall equipment package for the ADP facility. Property owners in RVN cannot normally provide power except that which is available through the local power company. For this reason, precise power requirements are not specified in rental contracts.

e. Reference paragraph 6, page 8, concerning CONUS training in inventory management: Recommend that the comments of the reporting unit be forwarded to appropriate CONUS agencies for consideration.

f. Reference paragraph 2a(7), page 7, and paragraph 7, page 8, concerning maintenance support: Concur. The UNIVAC 1005 maintenance situation is direct result of the deployment of commercial ADP equipment to a combat zone without having a firm commitment from the manufacturer for maintenance support, and the initial lack of an adequate military maintenance personnel training base for this equipment. In the absence of experienced military maintenance personnel, increased manufacturer support is mandatory. The General Services Administration is presently negotiating a change to the UNIVAC contract to provide for increased maintenance support in RVN. It is recommended that:

(1) Da attempt to expedite revision of the UNIVAC contract to provide increased maintenance support in RVN.

(2) That this command be given priority consideration for assignment of experienced UNIVAC 1005 military maintenance personnel.

g. Reference paragraph 2a(9), page 7, and paragraph 9, page 9, concerning the requirement for a systems study: Concur. A comprehensive systems study is a prerequisite to the determination of required capabilities in order that selection of appropriate ADP equipment can be made. This headquarters has taken action to initiate preliminary analysis and design effort which will result in systems specifications for the final USARV automated management and supply system. Contract technical assistance for the sytem design was requested from USAMUCAC by letter, AVHGD-FO, subject: Request for Assistance, System Design, 4 March 1967.

FOR THE COMMANDER:

E. L. KENNEDY
CPT, AGC
Asst Adjutant General

1 Incl
nc

GPOP-OT(9 Apr 67) 3d Ind
SUBJECT: Operational Report for Quarterly Period Ending 31 January 1967 (RCS CSFOR-65) - Hq 14th Inv Control Cen

HQ, US ARMY, PACIFIC, APO San Francisco 96558 29 JUN 1967

TO: Assistant Chief of Staff for Force Development, Department of the Army, Washington, D. C. 20310

1. This headquarters concurs in basic report as indorsed.

2. Reference paragraph 2f(1),2d indorsement. Supplement Number 9 to the GSA/UNIVAC contract was published 6 March 1967. DA clarification, necessary prior to implementation, was received 10 May 1967 and furnished to Hq USARV by letter, this headquarters, on 17 May 1967. In the interim UNIVAC has deployed additional maintenance personnel to Vietnam; has established a parts depot in-country; and in cooperation with Hq USARV is making periodic visits to those units whose maintenance personnel require assistance.

3. Reference paragraph 2f(2), 2d indorsement. USARV has been given priority consideration for assignment of UNIVAC trained military maintenance personnel. There are no UNIVAC experienced military maintenance personnel and none will be available until such time as training capability exceeds requirements.

FOR THE COMMANDER IN CHIEF:

G. R. KOBALY
CPT, AGC
Asst AG

1 Incl
nc